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Derwent Title: **Apparatus to produce three-dimensional object using electromagnetic rays**Original Title: ☒ **DE29911122U1: Vorrichtung zum Herstellen eines dreidimensionalen Objektes**Assignee: **DELTAMED MEDIZINPRODUKTE GMBH** Non-standard company
HAP HANDHABUNGS AUTOMATISIERUNGS Non-standard company
SITEC INDUSTRIE TECHNOLOGIE GMBH Non-standard companyInventor: **None**Accession/
Update: **1999-563226 / 199948**IPC Code: **G03F 7/20 ; B29C 35/08 ; B29C 67/00 ;**Derwent Classes: **A32; P84;**Manual Codes: **A11-B16(Stereographic moulding) , A11-C02B(Crosslinking with irradiation) , A11-C02D(Crosslinking involving moulding and/or foaming)**

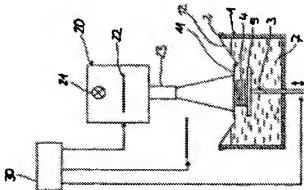
Derwent Abstract: (DE29911122U) **Novelty** - The apparatus to produce a three-dimension object bonds layers together by electromagnetic rays. The vessel (1) has a transparent plate (11) over the carrier (3,5), to allow the electromagnetic rays to pass through.

Detailed Description - The under side of the plate (11), towards the carrier, has a nonstick coating to prevent adhesion with the bonded material. The plate is placed at a given gap below the upper edge of the vessel so that it is immersed in the material when the vessel is filled. The plate has a smaller cross section than the dimensions of the carrier surface. The plate (11) has an adjustable height and angle setting. A mechanism raises and lowers the carrier (3,5) in the vessel (1) in relation to the under side of the plate (11). The horizontal position of the plate (11) is adjustable, in relation to the carrier (3). The electromagnetic rays are generated by a lamp, with light in the visible spectrum. The unit to form a mask has a liquid crystal display, controlled by the data relating to the cross section of the object, or it is a digital mirror system.

Use - The system is for the production of a three-dimensional object using a vessel filled with a polymer which hardens in visible light rays.

Advantage - The operation gives a three-dimension object, using a mask, with an increased structure resolution.

Images:



Description of Drawing(s) - The drawing shows a schematic cross section of the apparatus. Vessel 1, Carrier 3,5, Transparent plate 11 [Dwg.1/5](#)

Family: **PDF Patent Pub. Date Derwent Update Pages Language IPC Code**
☒ **DE29911122U1 * 1999-09-30 199948 15 German G03F 7/20**